# V. SUMMARY AND CONCLUSIONS

This report has reviewed the archaeological record documented at the Beech Ridge Site in Dover, Delaware. Data-recovery excavations at this site revealed a deep view into the past, a view that has exposed segments of various Native-American uses of the landform through time. It is clear that the landform that is the Beech Ridge Site—one that evolved as a result of changing depositional processes—served differing purposes throughout the occupational history of the site. A summary discussion is presented here to review the main points distilled from the preceding chapter regarding the site's contribution to local and regional archaeology, information that should be of interest to both professionals and other parties. This discussion will focus on the principal organizing themes that have been followed in the analysis presented in earlier chapters. These themes include 1) a basic chronological ordering at the site, 2) the related issue of chronology in regard to depositional events tied to shifting climatic scenarios, 3) patterning of lithic materials and their implications for understanding small, task-specific visits (occupations) to the site, 4) relating such events to models derived from ethnographic narratives dealing with both the South American tropical lowlands and other parts of the world (South Africa and Alaska, or the Arctic), and 5) placing these events within a perspective (or *model*, for the professional) that views Native-American use of the landscape as a set of choices based on resource location. Summarizing these themes will hopefully help place the raw data of archaeological deposits from the Beech Ridge Site within an anthropologically informed narrative to convey an idea of what happened throughout the Holocene in the Delmarva region.

## THE CHRONOLOGICAL MATRIX

"Time is the big one for Archaeologists."
C. Gamble, *Archaeology: The Basics*

Archaeologists have sought meaning in time, and how to measure it, since the beginnings of the discipline. Material culture, the core of the discipline—the sherds, flakes, FCR, and other artifact categories—means nothing unless organized along several very basic dimensions, one being time. It is one of the first of several dimensions that provide insight into the past with which archaeologists grapple. It is one of the three dimensions that Spaulding discusses in his seminal, though largely forgotten, paper "The Dimensions of Archaeology," published in *Essays in the Science of Culture in Honor of Leslie A. White*, a book published in 1960 honoring the well-known cultural evolutionist and edited by Gertrude E. Dole and Robert L. Carneiro. The other two dimensions Spaulding discusses are form and space, both of which will receive treatment within the course of this discussion. Gamble links time with the dimension of space as two intertwined aspects of the archaeological process (though curiously he does not cite Spaulding's paper in his discussion).

Measurement of time is not done for its own sake, but to provide a framework for viewing the quite malleable features of a sociocultural system's material residue. These materials are the remaining signatures (artifact patterns controlled by excavated context) of ongoing cultural

processes that inform one of a variety of phenomena. Single events—such as occupying a one-night hunting camp and modifying stone tools there—are activities embedded within a larger process or series of processes that endure through time. Directionality of such processes, such as the change from hunter-gatherer to cultivator (a large-scale phenomena to be sure) or, more locally, a process of change from using rhyolite as a lithic material to using quartz, require a calibrated framework of chronological control to provide some understanding of the how, why, and where of such processes.

Time and the framework it casts over cultural materials were central to archaeology throughout the early to mid-twentieth century. So pervasive were efforts to establish chronologies (local and regional sequences based on pottery types or point typologies) that historians of the discipline have described it as the Classificatory-Historical period (Willey and Sabloff 1974) or the period of culture-historical archaeology (Trigger 1989). The classic monographs still used today that established local and regional sequences are diverse and important. A short list from both North and South America, in no particular order, includes Howard's *Excavations at Ronquín, Venezuela* (1942), Willey's *Archaeology of the Florida Gulf Coast* (1949), Meggers and Evan's *Archeological Investigations at the Mouth of the Amazon* (1957), Goggin's *Space and Time Perspective in Northern St. John's Archeology, Florida* (1952), Phillips, Ford, and Griffin's *Archaeological Survey in the Lower Mississippi Alluvial Valley, 1941–1947* (1951), Phillip's follow up volume on the latter work, the monumental *Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949–1955* (1970), Lathrap's *The Upper Amazon* (1970), Coe's *The Formative Cultures of the Carolina Piedmont* (1964), and Broyles' *The Second Preliminary Report on the St. Alban's Site* (1971). Many other works could be added to the list.

All of these monographs were focused on building a chronological framework within specific geographic regions. While faulted for dealing almost exclusively with time or creation of local chronological frameworks, a more interpretive goal, albeit not well formulated, is embedded in most of these works to move beyond time as an end point. It would be a fair assessment to say that most investigators had goals of developing an understanding of past events and not just dating them. It is useful to consider that area-wide synthetic works, such as Willey and Phillip's *Method and Theory in American Archaeology* (1958) and Caldwell's *Trend and Tradition in the Prehistory of the Eastern United States* (1958), were published once the field had been saturated by local and regional culture histories, and because a basis for more synthetic views could be attempted. Griffin's shorter paper published in 1960, "Eastern North American Archaeology: A Summary," falls within the same move by a number of investigators towards developing a more synthetic approach to the archaeological record. Ritchie's book, *The Archeology of New York State*, first published in 1966, was an effort to realize the conjunctive approach Walter Taylor advocated in his 1948 monograph *A Study of Archaeology*. The latter monograph strongly argues that archaeology must lead beyond simple chronology-building efforts; Taylor had developed an approach that largely mirrored Functionalism as practiced in British social anthropology. In a sense, investigators realized that once basic chronological control was established over regions, issues of anthropological import could be examined. In large part the New Archeology developed from (or in reaction to) this thicket of culture history, though how it did so is certainly beyond the scope of this discussion. But it was part of the trend towards leaving behind efforts of chronology building and moving on to a consideration of archaeology as a study of past societies.

*Beech Ridge Culture-Historical Narrative*

A broad sweep of time is preserved in the deposits making up the Beech Ridge Site. Work at this site exposed a chronologically deep slice of time as represented by classic projectile points separated in a stratigraphic column that accreted throughout the Holocene. Perhaps the most significant contribution to regional archaeology the Beech Ridge Site offers is this sequence. The above discussion on culture history provides a backdrop that highlights the importance of the stratified Archaic deposits exposed in the Beech Ridge excavations. Each individual site varies in terms of the kinds of issues that can be addressed with the data (archaeological materials) recovered during fieldwork. In view of this, Beech Ridge is significant for the sequence of late Paleoindian to Late Archaic projectile points recovered from variably sealed deposits. Plate 5.1, adapted from Chapter IV, shows the points in a stratified sequence, from the late Paleoindian Dalton-Hardaway point to the lobate-based Early Woodland points that are variants of the Piscataway type defined in Maryland. This sequence of point types closely matches other sequences defined in the Eastern United States. The duplication of this sequence from Beech Ridge underscores how widespread basic stylistic concepts in projectile point styles (or types) are and their importance in marking specific blocks of time.

The occupational history of Beech Ridge begins with the late Paleoindian Dalton-Hardaway component, identified via the single specimen of this type recovered from the northern part of the site, within the upper part of the paleosol B horizon. Chronological placement of this point was reviewed in Chapter III and again briefly in Chapter IV. This point is part of a widespread late Paleoindian horizon that has been recorded throughout Eastern North America. Gardner noted that it is representative of the Late Paleoindian period in the Shenandoah Valley based on work at the Thunderbird Site (44WR44) and related sites in the region. It has been well dated within stratigraphic contexts that immediately precede corner-notched Early Archaic deposits in a number of key sites. This point is useful in supporting the late Pleistocene to Early Holocene age of the paleosol B horizon present across the landform the Beech Ridge Site occupies. Vento has argued (see his report in Appendix B) that this horizon marks a weathered Pleistocene surface available for occupation by Paleoindian and, perhaps, Early Archaic native groups.

No other diagnostic materials were recovered in direct association with the Dalton-Hardaway point. However, it can be assumed that the very few flakes present within the paleosol B horizon of the same unit reflect low-density curation or resharpening episodes dating to the late Paleoindian period at the site. This is particularly evident in the large block unit, where the flake distribution mapped for this horizon is markedly different from the distribution of materials in the overlaying levels that sampled the lowest portion of the C horizon. As noted in the section on stratigraphy, this C horizon capped the paleosol B horizon and extended upwards to the base of the A horizon. Taken together, the debitage from this lower horizon are considered to be associated with at least two (if not more) visits to the Beech Ridge landform during the late Paleoindian period. Whether or not some of this debitage can be associated with an earlier Clovis occupation is unknown. Assuming the debitage is contemporary with the Dalton-Hardaway component seems the best interpretation, given the contextual evidence available. In terms of behavioral inferences for this low-density Paleoindian component or components, it is suggested that the debitage reflects maintenance of a hunting toolkit during the course of short-


Plate 5.1 The Late Paleoindian through Middle Archaic Point Sequence.

term occupations of the now-buried landform. Beginning with the Paleoindian period, use of this landform followed a remarkably similar pattern through the site's occupational history.

Moving forward in time, the next component/occupation at the site dates to the Early Archaic period. In three localities close to the core of the site—where the paleo-topographic high point is located—corner-notched points identifiable as members of the Palmer/Kirk type cluster were recovered. Two of these points are complete specimens, while the third is a nearly complete example missing most of the stem, though preserving the notched corners. All three points were recovered from just a few centimeters above the contact of the thick C horizon with the underlying paleosol B horizon. These three points, well dated at other sites to about 10,000 years B.P., clearly show that development (or deposition) of the thick C horizon was initiated close to the beginning of the Holocene. Given both stratigraphic context and proximity in space, it is assumed that all three points represent closely spaced (in real time) visits to the site. No features were documented associated with the points, nor were any scattered pieces of FCR present to suggest disturbed hearths. Other tool categories, such as scrapers or cobble tools, were absent from the Palmer/Kirk stratigraphic contexts.

Maps of debitage show several concentrations within the block area in Palmer/Kirk stratigraphic contexts. Low-density flaking clusters, horizontally discrete, mark short-term curation events on the Palmer/Kirk living surface. These low-density flaking "events" are interpreted as a clear signature of toolkit maintenance conducted during the course of short-term hunting/game-monitoring events. As discussed in Chapter IV, the basic inference derived from evidence regarding factors of spatial integrity, raw material, and stratigraphic position is that each event marks a single behavioral episode of toolkit maintenance or hafted biface resharpening. As noted in the previous chapter, the flakes from each of these events are uniformly small, most being edge-retouch pressure flakes removed from the margin of a hafted biface (or projectile point).

There are several excellent markers for the Middle Archaic period stratified above the Palmer/Kirk stratigraphic context. The earliest specimen is a proximal fragment of a LeCroy bifurcate point recovered midway through the C horizon. This point fragment, manufactured from yellowish brown jasper, was recovered from the same 2-x-2-meter block unit that produced the first Palmer/Kirk specimen. These two points were separated by approximately 20 centimeters of sandy loam C horizon sediment and provide an excellent example of relative stratigraphy in point types. In addition to the bifurcate point, three Morrow Mountain specimens and a Brewerton/Halifax side-notched specimen were recovered from the middle and upper parts, respectively, of the sandy loam C horizon.

The recovery of several Middle Archaic point types from stratigraphic contexts midway through the C horizon suggests that aggradation of this thick horizon was slow, or perhaps variable, with periods of erosion countered by deposition, leading to a series of overlapping and poorly defined living floors. However, no evidence of stasis—as represented in the well-developed B-horizon paleosol—is present. This C horizon masks multiple living surfaces that cannot be visually distinguished. Depositional processes buried short-term surfaces, while subsequent weathering erased or digested the organics that would have delineated individual paleosol surfaces.

The distribution of the flaking debris from the large block shows that some of the events can be horizontally isolated and, again, taken to represent individual episodes of toolkit maintenance. However, it is less clear if these can be associated with the LeCroy Bifurcate occupation or subsequent Morrow Mountain period components.

The side-notched Brewerton/Halifax specimen—recovered from the N94.5 E112 block unit that contained the Dalton-Hardaway point—was in the upper part of the C horizon defined at the site. Here, this horizon was not as deep as found in the rest of the site. Little debitage from this horizon was recovered, and it is difficult to clearly associate specific curation or resharpening events with a late Middle Archaic side-notched component. Given the extreme reworking of the blade relative to the hafting element of this point, it was obviously reworked while hafted until it was a stub.

Specimens recovered during HCI's Phase II investigation better represent closing phases of the Archaic occupation at the site. In Coe's Carolina Piedmont sequence, broad-bladed and smaller parallel-stemmed to nearly parallel-stemmed Savannah River points are found stratified above side-notched Halifax points; none, however, were recovered at Beech Ridge. Three examples of Bare Island points were present in the Phase II assemblage; these points date to the Late Archaic period in the Susquehanna Valley. These points, first defined by Kinsey based on excavations on Bare Island close to the Maryland-Pennsylvania border (Kinsey 1959), are equivalent to the small variant of the Savannah River point Coe defined. These specimens are then taken to mark the Late Archaic period occupation at the site.

The cultural and natural stratigraphy is compressed between the top of the C horizon and the overlaying organic horizon that caps the site. Projectile points and ceramics that represent everything from Early to Late Woodland and more recent historic use of the landform are present in the upper 20 to 25 centimeters. No separation between these components was present, nor is any expected in view of the gradual eolian processes of deposition that slowed considerably in comparison to earlier periods. Early Woodland teardrop projectile points, Fox Creek projectile points, and Late Woodland shell-tempered ceramics were all recovered from comparable stratigraphic contexts. The depositional matrix at the Beech Ridge Site thus loses its ability to contribute to chronological issues after about 3500 B.P.

## GOING BEYOND THE ARCHAEOLOGY

Most of the information presented here has been concerned with the archaeological record and its geomorphological contexts. Once this descriptive effort is concluded, interpretive efforts move toward considering various anthropological models that may have application for understanding the suite of occupations at the Beech Ridge Site. As has been noted in many instances herein, the late Paleoindian and Archaic (especially Early and Middle Archaic period) components are interpreted as short-term hunting camps or monitoring stations that left faint, low-density archaeological signatures. In the sections below, comparative ethnographic models are reviewed that may provide a plausible "just so" story that accounts for the kinds of occupations that formed the Beech Ridge archaeological record. The bridge that links the archaeological record

to an anthropological body of knowledge is also discussed briefly. Going from one realm to another involves crossing a methodological threshold. How plausible information is gained by crossing this threshold is discussed after the presentation of various ethnographic models, seen as parallels to the late Paleoindian and Archaic occupations at the site.

*Modeling Site Use*

"There are many reasons for going into the forest other than hunting."

"Frequently, depending on the season, whole families spend days or even weeks in the forest, building temporary shelters."

G. Reichel-Dolmatoff, *The Forest Within: The World-view of Tukano Amazonian Indian*

"Archeologists have worked too long without the benefits of the understandings of ethnology as to the operations of sociocultural systems."

L. R. Binford, in *Man the Hunter*

The first two of the above three quotes, taken from Reichel-Dolmatoff's remarkable book (1996) on the ecological worldview of Tukano groups in the Northwest Amazon, point to a range of landscape use that have quite distinct implications for archaeologists. The material culture signature (archaeologically seen or inferred) from the implied variety of forest use in this case is usually one of low visibility. It is reasonable to assume too that tasks related to hunting, especially those instances wherein lithic materials feature as a significant part of the hunting armature, will leave more residue, archaeologically speaking, than visits focused on collecting plants or a shaman "mapping onto" the forest environment exploring for new plants and their potential ritual uses. It would be wise to say that the forest provides a wide spectrum of use for Native Americans, but only a few of these would provide an archaeological signature for interpretation, or "reading the past," to borrow a concept from Hodder. Since the suite of archaeological evidence from the Archaic use of the Beech Ridge landform pertain to hunting, the following paragraphs will focus on relating the site patterning evident (especially the lower levels) with models derived/developed from ethnographic literature.

Reichel-Dolmatoff goes into detail about the ritual, social, and dietary constraints and preparations that an individual hunter engages in prior to entering the forest. Perhaps all these preparations could fall under the category of ritual; all have a ritual component linked to a specific worldview. Clear patterns of behavior—including food abstinence, avoidance of sexual consort, certain categories of dreams, and the use of hallucinogenic drugs—are part of the hunter's preparation. And all such preparations tie into a rich universe of myth, invisible beings (every material thing having a spiritual counterpart), and a veritable parallel world to the visible human enterprise. Yet burdened as it may be with mythic content, the archaeological signature resulting from the hunter's visit to points on the landscape may be nothing more than a small hearth, discarded material from preparing and repairing tools for the hunt (in the case of Beech Ridge, debitage and scattered FCR), and discarded artifacts such as a projectile point or points (Beech Ridge) or a basket (South American lowlands). But such material remains were at one time laden with meaning, metaphors for the parallel world noted above. To an archaeologist, the debitage (patterned or otherwise), discarded point(s), and other recovered materials provide a

*threshold* to another world that lies beyond the patterning mapped in the ground. The challenge is to somehow get through the threshold to understand the context in which behavior took place.

Getting to and through (if possible) the interpretive threshold for the Beech Ridge Archaic occupations will be attempted by employing ethnographic data taken from the lowland tropics of South America, as well as other regions of the world. In this sense, the third quote above is appropriate. Ethnographic case studies, essentially vignettes of behavior, are offered as a basis to *suggest* relationships more than to attempt explanations for observed archaeological patterning. Two principal assumptions need to be noted preparatory to presenting case studies. One assumption is that the archaeological residues dating from the late Paleoindian through to the Late Archaic period at the Beech Ridge Site are low-density signatures marking short-term or casual visits to the site conducted as part of a hunting strategy encompassing the Beech Ridge landform and perhaps similar settings. The basis for this assumption lies in the lithic events mapped within the large block discussed in Chapter IV, and the more basic (and second) assumption that points recovered from excavated contexts were used for hunting purposes and went through a cycle of use (maintenance to discard). The use of points, the rejuvenation of these points, and the preparation of new implements all contributed to the formation of the Beech Ridge archaeological record.

The second assumption of the two noted above involves the role of hunting itself in both egalitarian hunter-forager societies and egalitarian to ranked groups engaged in cultivation. It is assumed herein that hunting, as a behavior, will be similar in terms of the technology employed, use of the landscape, and perhaps the generation of archaeological evidence in both these societal categories. Whether or not the ritual context in which hunting is conducted would be similar or not is unknown. To summarize, models or case studies taken from varying ethnographic contexts may help in understanding the range of archaeological residues present throughout the Holocene deposits at Beech Ridge. This is done in light of Binford's suggestion that comparable social or ethnographic units be used in developing ethnological models for archaeological interpretation (Binford 1968:272).

The following are several examples taken from field observations and the ethnographic literature regarding transient hunting camps and their archaeological signatures. These examples provide analogs, currently or recently observable, that may inform the nature of repeated Archaic hunting visits to the Beech Ridge landscape (and note herein that the words "landform" and "landscape" are used interchangeably).

*Case One.* This example refers to a small overnight hunting camp situated along the south side of a stream, Caño Pozo Azul, in the Venezuelan lowlands along the Orinoco. Documented in 1992, this camp consisted of three hearths associated with a roofed sleeping area. It was situated at the edge of the savanna, where it met tropical gallery forest associated with the small stream. The site was located in an edge area where game and fish can be readily obtained. The core of the site was a quickly built sleeping area, a minimally roofed-in shelter using palm fronds leaning against crossbars lashed to existing trees, the latter serving as convenient hammock-tying posts and spaced only about 1.5 meters apart. Three separate hearths had been constructed, each functionally discrete. One hearth was on the floor beneath the roofed-in sleeping area and likely provided smoke to keep insects at bay. Immediately outside of the shelter was a four-legged

barbecue stand heavily stained with grease from grilling fish and meat. The third hearth was approximately two meters away and was used for roasting locally collected palm nuts. All three hearths were constructed on the ground with firewood arrayed in a star-shaped fashion typical of the area (and of Native-American hearths in general). The only discard item of material culture was a basket, undoubtedly used in collecting palm nuts.

The footprint of this camp was contained within an area measuring only five to six meters in extent. The archaeological remains present on a second visit four years later were limited almost exclusively to charcoal staining from the three hearths. The crossbars placed between the existing trees had rotted off and were non-existent; the charcoal smudge was evident where the small hearth had been located. The trees, of course, still stood. The upright legs of the barbecue were gone, as well. The charcoal was present and buried in grass. And only a dispersed smudge of charcoal marked the nut-roasting hearth. The entire camp would have fit within the major block unit excavated at Beech Ridge.

This camp illustrates how well space is organized within short-term camps. Sleeping areas, hearths, and discard areas (for the one basket) all occupy separate localities to mark where these activities were conducted. The camp's setting maximizes exploitation of local mammalian and aquatic resources, as well as foraging for readily available palm fruits abundant in the forest. Given the facilities for roasting, it is assumed that this camp marked a several-day stay while intensive fishing and hunting was conducted within the surrounding area. Patterns of Guahibo settlement in the region suggest that this camp was actively used as a short-term staging locality away from the main settlement, located several kilometers away.

*Case Two.* This example refers to a camp similar to that described above. It was located along a small stream tributary to Caño Agua Linda, which flows into the Orinoco River several kilometers to the west. It was constructed within the tropical gallery forest along the stream. The camp consisted of a simple lean-to and associated hearth. The lean-to was constructed by placing two-upright posts into the ground linked by a crossbar. A simple roof was formed by leaning large palm fronds across the crossbar, with the ends of the frond stems resting on the ground. The hearth, formed using a ring of granite rocks, was placed beneath the crossbar. The depth of the shelter from the hearth to the back of the roof was approximately 1.5 meters. The crossbar supporting the palm fronds was about 1.5 meters in height. The shelter was large enough to accommodate two individuals, sitting or lying down. No evidence for hammock supports was present, so it is assumed that sleeping was done on the ground close to the hearth.

The discarded materials include several half-consumed palm fruits and the remains of a manioc cake. No items of material culture—such as baskets or arrow shafts—were present. Subsequent visits to this site in 1997 and 1999 allowed views into its return to nature. In 1999, only the hearth, marked by the granite ring around a charcoal pocket, remained.

Though smaller in its entire footprint than the camp described in case one, this small overnight camp revealed spatial organization, albeit on a tighter floor plan. It was situated close to an active stream not far from the edge area formed by the savanna-tropical forest, where biomass (game) is higher and fish are available. Palm nuts are a foraged subsistence item and widely

available in the forest. Again, given current Guahibo settlement patterns, this camp undoubtedly served as a transient or overnight hunting-fishing-foraging station.

*Case Three.* This example refers to an isolated hearth located on a small ridge between two streams tributary to the Orinoco. It was within the outer edge of the dense tropical forest bordering the western fringe of the Guiana Shield. The camp consisted of a small barbecue stand formed by two upright posts linked with a crossbar above a small hearth. The spaces between the crossbars were approximately 80 centimeters, while the hearth itself was closer to 50 centimeters in diameter. Firewood was arrayed in a star-shaped fashion around the core. This small barbecue stand was used (based on informant data) for roasting game during the course of an overnight stay, while engaged in a several-day hunt away from the principal village.

Many examples of the latter have been seen in the surrounding area. Isolated hearths are frequently found on ridges between streams and on the sand banks of the Orinoco during the dry season. All of these overnight spots occur in localities close to known game paths, where positions are taken to monitor well-worn paths along small streams. Indeed, hunting, to be successful, requires an understanding of mammalian behavior, including feeding-browsing localities, salt licks, and paths that link these together in a net encompassing the landscape away from the main dwelling or base camp. The examples above show a clear understanding of game behavior, and overnight camps and monitoring stations are situated in regard to this knowledge.

A review of some of the literature from other regions in South America shows similar patterns to those documented above; these descriptions will help inform a model for understanding the Beech Ridge Archaic components. For instance, Roth provides excellent descriptions of temporary shelters in Guyana (formerly British Guiana) similar to those described above from Venezuela, shelters that take advantage of standing trees or were built from small timbers cut in the forest (1924:250–253). Yde provides additional descriptions of similar shelters in neighboring Surinam (1965:146–148). Both authors note that these shelters are built in the course of hunting and fishing expeditions, or when Native Americans were caught in the forest at nightfall while returning to the village. In some cases, these temporary shelters are maintained because they are located in known localities that maximize fishing or hunting.

These small camps found throughout the tropical forest are examples of a settlement pattern that Gardner termed “fission-fusion,” a pattern made up of base camps and smaller extractive type camps found in the Shenandoah Valley and other regions of the Middle Atlantic region (Gardner 1980). These extractive camps represent small task groups departing from larger groups for specific purposes, in this case, fishing. The archaeological signature is small in spatial extent and low in terms of excavated visibility. This pattern is comparable to what Lee (1979; see below) has termed the “concentration-dispersion” model of band organization. Both are applicable to understanding late Paleoindian and Archaic settlement in the Middle Atlantic region.

The above examples of hunting camps from the lowland tropics are taken from known groups that are egalitarian in organization and dependent on a horticultural subsistence base. The view taken here is that hunting among such groups and its organization is structurally similar to less

complex hunting-gathering or hunter-forager groups. A review of some of the work conducted on such groups is necessary to provide another possible base for understanding Beech Ridge.

The work done by Lee and others among the Kalahari Kung San (hereinafter referred to as the San) and related groups (Lee 1979; Lee and DeVore 1976) provides the basis for most of our knowledge of hunter-gatherers and bands as an anthropological societal "type." Work with the San has been significant in the theoretical development of band organization. Analysis of the footprint of San camps has figured prominently in ethnoarchaeological analysis. Indeed, some of Lee's observations are quite relevant for understanding the Beech Ridge archaeological record. Most basic is his statement that "All hunting and gathering peoples live in organized groups that move frequently through their ranges" (Lee, in Lee and DeVore 1976:74). Much of the discussion in Lee's paper focuses on band organization, its flexibility, and its ability to "map" onto various resources. The concept of flexibility in group organization was expanded in his book on the San (Lee 1979). Lee was concerned with the applicability of the patrilocal model of band organization for understanding the flexible social organization of the San. He argued that the bilateral organization of the San was an adaptive response to dispersed and changing resources, mainly water, which characterized the Kalahari region (Lee 1979:350–361). The variable spatial distribution of the water, either in the form of rainfall or sources of standing water, supports an argument against development of territoriality and ensured access to resources that were dispersed and seasonal in nature.

A discussion of the theory behind band organization is beyond the scope of this work. However, the concepts of flexibility, dispersed resources, and the need to have access to them throughout the region—as Lee discusses for the San—offer one model to view the late Paleoindian and Archaic occupations at Beech Ridge. Groups go through a cycle of concentration and dispersion in direct response to availability of specific resources (water, in the case of the San) that more or less mandates an organizational principle underlying the flexibility of bands. Lee reviews briefly a number of other hunter-gatherer groups (Lee 1979:360–361) in this light. The model of concentration-dispersion Lee describes can be applied to the earlier occupations at Beech Ridge. The existence of small transient camps marked by a discarded point and small amounts of edge-retouch debitage is the far end of organizational "dispersion" (or fission, in Gardner's term) of a band that is "mapping" onto specific resources.

*The Concept of Threshold*

The difficult and perhaps most challenging part of doing archaeology is constructing a reliable argument that relates patterns observed in the ground to meaningful examples (kinds, types, and processes) of human behavior. Cultural anthropologists and other observers have categorized such behavior in statements that have (or can have) a universal applicability for a comparative science of culture (in Leslie White's terms [White 1959]). An example is the concept of flexibility as an organizational principal for hunter-gatherers as defined by Lee. Recognizing patterns in the archaeological record and demonstrating how they refer to discrete episodes or events that took place within a narrow slice of time (perhaps a single "point" in time) depends upon controlling archaeological context during excavation. This control over the archaeological record includes three major factors that can affect material residues and their links to past behavior, such as 1) post-occupational disturbance of material residue, 2) the degree of

resolution in the stratigraphic column (Are individual chipping clusters palimpsests of multiple visits on a paleosol "floor," or single-event phenomena left relatively undisturbed? And were they separated by aggradation of the surface through eolian processes?), and 3) the employment of suitable recovery techniques to record patterns in the ground (such as careful stratigraphic excavation, scaled mapping of events, small-scale artifact recovery, etc.) and the means to convey these patterns in narrative and graphic forms.

Once all this information is defined, recorded, and made accessible in a narrative form (such as found in a "technical" report, a disdainful name if there ever was one), a threshold is reached. How does one move from patterning of material remains to meaningful statements that have some reference in cultural behavior? Or, phrased in other words: How does one get from descriptive statements (of the archaeological record) to an interpretive and reliable account of events that occurred in the past? This shift in emphasis is the interpretive threshold, beyond which is found the realm of culture, living people, belief systems, etc. An archaeologist must cross this threshold through an argument connecting the mute signature of material residues to vibrant societies long vanished. And this nexus is the subject of middle-range theories discussed in Binford's ethnoarchaeological work, a pursuit focused on constructing "arguments of relevance" to form a bridge between patterning in material remains to an explanatory framework that accounts for cultural organization. In efforts to get through the threshold, investigators have employed experimental archaeology (such as Callahan's flint-knapping experiments [1982]), ethnoarchaeological studies (such as Binford's work with hunter-gatherers [Binford 2002]), and replication studies (such as constructing a sweat lodge at the Hickory Bluff Site to develop an explanatory framework for FCR [Petraglia et al. 2002]).

A different threshold is reached at the end product of ethnoarchaeological work. Studies such as those noted above document relationships between material remains, human activity, and the landscape (culturally or naturally constructed) and point to patterns that would leave differing kinds of archaeological patterns if recovered from buried contexts. There have been many cautionary notes about using ethnoarchaeological models to explicate the archaeological record. Simple analogy relating ethnographic scenarios to archaeological problems may not be sufficient. As Binford noted, use of ethnographic research may suggest hypothetical scenarios that could be tested with archaeological data, a position he articulated in a brief paper (Lee and DeVore 1968). To this end, his 2002 magnum opus, *Constructing Frames of Reference*, is an attempt to follow through with this suggestion.

Underlying this suggestion is an assumption about human/cultural behavior, an assumption similar to the principle of uniformitarianism in geology. In geology and its related studies, results of natural events observable in the present are identical to those same kinds of events that took place in the past. In anthropology, widespread similarities in social organization can be shown. Similar kinds of group organization appear to develop in widespread parts of the world in response to similar kinds of social and environmental conditions. In anthropology, it can be assumed (at least within the chronological range of *H. sapiens*) that certain categories of cultural behavior amongst currently observable groups would leave similar kinds of material signatures. For example, hunting behavior—carried out by small groups or individuals and organized around knowledge of the natural world and the prey that inhabits it—will be similar now and in the past. Caveats may be applied, such as considerations for the presence of metal rather than stone in

hunting toolkits, or of metal pots rather than ceramic vessels, etc. But such considerations are useful and provide the link to understanding patterns of hunting and use of the landscape in the more remote past, such as the archaeological remains sampled at the Beech Ridge Site.

Similarly, it can be assumed that organizational principles and their material correlates documented in the ethnographic present would be comparable to the archaeological record and its organizational correlates among hunter-gatherers and more complexly organized societies. The threshold between the ethnographic present and the archaeological past is crossed by means of inferences, built up from observations on the archaeological record, that have a general level of applicability. A concept of cultural uniformitarianism, where events observed in the present are similar to those that occurred in the past, is necessary to make sense of the archaeological record.

In light of the above, it is suggested that small lithic "events" and the discarded projectile points found in late Paleoindian to Early and Middle Archaic contexts at the Beech Ridge Site are the archaeological equivalents of small task groups, marking the far end of a pattern of societal dispersal, or fission, of band societies that operated over the Delmarva region. The Beech Ridge Site serves, at the most basic level, as a chronological yardstick for the late Paleoindian and Early to Middle Archaic occupation of the region. On another level, the Beech Ridge Site is a small but important window into a pattern of widespread landscape use that can serve as the basis for developing a view on band organization, archaeologically defined, that may be refined through time.